WHAT IS CLAIMED IS:

1. A diffraction type lens, disposed in a luminous flux, having a wavelength selectivity;

said lens being constituted by a substrate having one surface formed with a zone plate exhibiting a smaller converging action with respect to a wavelength λ_1 of light and a greater converging action with respect to a wavelength λ_2 of light, and the other surface formed with a zone plate exhibiting a smaller converging action with respect to said wavelength λ_2 of light and a greater converging action with respect to said wavelength λ_1 of light, said substrate being transparent to said wavelengths λ_1 and λ_2 of light.

2. A diffraction type lens according to claim 1, wherein said diffraction type lens is shaped like a parallel plate.

3. A diffraction type lens according to claim 1, wherein each of said zone plates comprises concentric gratings each having a rectangular cross section.

4. A diffraction type lens according to claim 1, wherein said one surface formed with the zone plate has a height h_1 satisfying the following conditional expressions (1) and (2), and said the other surface formed with the zone plate has a height h_2 satisfying the following conditional expressions (3) and (4):

$$h_1 = L_1\lambda_1/(n_1 - 1) \qquad (1)$$

$$h_1 = M_1\lambda_2/(n_2 - 1) + K_1\lambda_2/2(n_2 - 1) \qquad (2)$$

$$h_2 = L_2\lambda_2/(n_2 - 1) \qquad (3)$$

$$h_2 = M_2\lambda_1/(n_1 - 1) + K_2\lambda_1/2(n_1 - 1) \qquad (4)$$

where

λ_1 and λ_2 are the respective wavelengths of two incident light beams;

n_1 is the refractive index of a grating portion with respect to the wavelength λ_1 of light;

n_2 is the refractive index of a grating portion with respect to the wavelength λ_2 of light;

L_1 and L_2 are positive integers;

M_1 is the maximum value among 0 and positive integers satisfying the conditional expression of $h_1 > M_1\lambda_2/(n_2 - 1)$;

M_2 is the maximum value among 0 and positive integers satisfying the conditional expression of $h_2 > M_2\lambda_1/(n_1 - 1)$; and

K_1 and K_2 are values of at least 0.65 but not exceeding 1.35.

5. An optical pickup apparatus comprising the diffraction type lens according to claim 1, wherein said luminous flux incident on said diffraction type lens is substantially a parallel luminous flux.

6. An optical pickup apparatus according to claim 5, wherein said luminous flux is converged at a position where two kinds of optical recording media having thickness values different from each other are disposed, said wavelength λ_1 of light being used for recording or reproducing one optical recording medium, said wavelength λ_2 of light being used for recording or reproducing the other optical recording medium.